

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

<b>WINN-DIXIE STORES, INC., <i>et al.</i>,</b>	:	
<b>Plaintiffs,</b>	:	<b>CIVIL ACTION</b>
	:	
<b>v.</b>	:	
	:	
<b>EASTERN MUSHROOM MARKETING</b>	:	
<b>COOPERATIVE, <i>et al.</i>,</b>	:	<b>No. 15-6480</b>
<b>Defendants.</b>	:	

# MEMORANDUM

**Schiller, J.**

**June 9, 2021**

Defendants<sup>1</sup> move to exclude the testimony of Plaintiffs Winn-Dixie and Bi-Lo's proposed expert Dr. Keith Leffler, Ph.D. Dr. Leffler is an Emeritus Associate Professor of Economics who analyzed the impact of the anticompetitive acts of the Eastern Mushroom Marketing Cooperative, Inc. (EMMC) and estimated Plaintiffs' damages. Meanwhile, Plaintiffs move to exclude the testimony of Defendants' proposed rebuttal expert, Dr. Jesse David, Ph.D. Dr. David is an economist and President of a consulting firm that provides economic and financial analysis for litigation and public policy matters. He analyzed the opinions of Plaintiffs' expert Dr. Leffler and provided opinions regarding Plaintiffs' alleged damages. For the reasons that follow, the Court

The motion was joined by Eastern Mushroom Marketing Cooperative, Inc. (EMMC); Robert A. Feranto, Jr., t/a Bella Mushroom Farms; Brownstone Mushroom Farms, Inc.; To-Jo Fresh Mushrooms, Inc.; Country Fresh Mushroom Co.; Gino Gaspari & Sons, Inc.; Kaolin Mushroom Farms, Inc.; South Mill Mushroom Sales, Inc.; Modern Mushroom Farms, Inc.; Sherrockee Mushroom Farm, LLC; C&C Carriage Mushroom Co.; Oakshire Mushroom Farm, Inc.; Phillips Mushroom Farms, Inc.; Louis M. Marson, Jr., Inc.; Monterey Mushrooms, Inc.; John Pia; and Forrest Mushrooms (collectively, “Certain Defendants”), Giorgi Mushroom Co.; Giorgio Foods, Inc.; Franklin Farms, Inc.; M. Cutone Mushroom Co., Inc.; J-M Farms, Inc.; and United Mushroom Farms Cooperative, Inc. While the motion was pending, claims against Franklin Organic Mushrooms, Inc. (f/k/a Franklin Farms, Inc.) and J-M Farms, Inc. were dismissed with prejudice.

will largely permit the testimony of both experts; however, the Court will limit the damages period proposed by Dr. Leffler to fit the facts of the case.

## **I. FACTUAL BACKGROUND**

This case is one in a related series of actions dealing with alleged price fixing and collusion in the market for fresh *Agaricus* mushrooms. In February 2006, WM Rosenstein & Sons Co. filed a class action complaint in this district alleging that the EMMC and its members and affiliates colluded to inflate the price of mushrooms by agreeing on minimum prices and by decommissioning various mushroom farms in order to reduce mushroom supply. The Rosenstein complaint was later consolidated with six similar class cases, and those putative class plaintiffs filed a consolidated class action complaint on November 13, 2007. The Plaintiff here, Winn-Dixie, along with co-plaintiff Bi-Lo, opted out of that consolidated class action, and initiated this matter in 2015. Plaintiffs' First Amended Complaint is similar in all meaningful respects to the class action complaint that preceded it. Two other plaintiffs that had historically opted out of the class action—Publix Super Markets, Inc. and Giant Eagle, Inc.—also filed complaints, which were consolidated with the class action.

### **A. Expert Reports in the Historic Opt-Out Cases**

The historic opt-out plaintiffs, Publix and Giant Eagle, retained Dr. Leffler as an expert witness. In the historic opt-out cases, Dr. Leffler's expert report analyzed the impact of EMMC's anticompetitive acts and estimated the damages the historic opt-out plaintiffs incurred using multiple regression analysis. *In re Mushroom Direct Purchaser Antitrust Litig.*, Civ A. No. 06-0620, 2015 WL 5775600, at \*1 (E.D. Pa. Aug. 5, 2015). "Multiple regression analysis is the comparing of variables to determine the influence that one variable, the independent or explanatory

variable, has on another variable, the dependent variable.” *Id.* Dr. Leffler ran two separate regression models, one for each historic opt-out plaintiff, which attempted to isolate and quantify the impact on mushroom prices caused by the EMMC’s policies. *Id.*

The EMMC defendants in the historic opt-out cases retained Dr. David as a rebuttal expert. Dr. David analyzed the expert opinion of Dr. Leffler and opined on the reliability of Dr. Leffler’s regression model. *Id.* Defendants in the historic opt-out cases filed a motion to exclude Dr. Leffler’s testimony, pursuant to Federal Rule of Evidence 702, and the historic opt-out plaintiffs filed a motion to exclude Dr. David’s testimony, pursuant to Rules 702 and 403. Following *Daubert* hearings for each expert witness, Judge O’Neill issued opinions denying both motions and permitting the proposed testimony of Drs. Leffler and David. The historic opt-out plaintiffs settled their cases before trial.

## **B. Expert Reports in this Action**

In this action, Winn-Dixie and Bi-Lo have also retained Dr. Leffler to analyze the EMMC’s market power and the impact of EMMC’s anticompetitive acts. Dr. Leffler’s initial report, dated July 2, 2020, offers opinions on these topics and estimates Plaintiffs’ overcharge damages for mushroom purchases from EMMC members and affiliates. (Pls.’ Ex. 18, Expert Report of Keith Leffler, Ph.D. [Leffler Rpt.].) The EMMC Defendants have once again retained Dr. David as a rebuttal expert. Dr. David’s expert report, dated July 23, 2020, analyzes the findings of Dr. Leffler’s initial report and provides opinions regarding his assessment of damages. (Pls.’ Ex. 2, Expert Report of Jessie David, Ph.D. [David Rpt.].) Dr. Leffler responds to Dr. David’s opinions in a rebuttal report dated August 13, 2020. (Pls.’ Ex. 8, Rebuttal Report of Keith Leffler, Ph.D. [Leffler Rebut. Rpt.].) Now before the Court are the parties’ respective motions to exclude the

proposed expert testimony of Drs. Leffler and David. In addition to Dr. David's expert report, Defendants' motion also presents a Declaration of Dr. David, dated August 31, 2020, in which he offers additional critiques of Dr. Leffler's opinions. (Defs.' Ex. B [David Decl.].) Plaintiffs' Response in Opposition presents a declaration of Dr. Leffler, dated October 2, 2020, which responds to arguments raised in Defendants' motion to exclude his testimony. (Pls.' Opp'n Ex. 1 [Leffler Decl.].)

Dr. Leffler's initial expert report opines that: (1) there is a relevant economic market for the sale of fresh *Agaricus* mushrooms in the eastern United States; (2) the EMMC controlled a sufficient percentage of those mushroom sales to have market power; (3) the anticompetitive actions of the EMMC caused the average prices of fresh *Agaricus* mushrooms sold to Winn-Dixie and Bi-Lo to be higher than competitive levels; and (4) as a result of the actions of the EMMC, Winn-Dixie and Bi-Lo suffered overcharge damages in the prices they paid for mushrooms. (Leffler Rpt. ¶ 4.) Dr. Leffler estimates the overcharge with an econometric analysis of mushroom prices paid by Winn-Dixie and Bi-Lo, controlling for supply and demand conditions. (*Id.* ¶ 53.) He performed this analysis by creating a model of fresh *Agaricus* mushroom prices using a standard multiple regression analysis with fixed-effects.<sup>2</sup> (*Id.* ¶¶ 54-55.)

Based on this regression analysis, Dr. Leffler's report offers opinions about the overcharge damages Winn-Dixie and Bi-Lo incurred in their mushroom purchases. (*Id.* at p. 32, Table 2.) Dr. Leffler's initial expert report splits Winn-Dixie's damages into three distinct conspiracy periods:

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<sup>2</sup> “[F]ixed effects allows the econometrician to identify statistical relationships after accounting for the...effects unique to subgroups...in the dependent variable. This can be important as these effects could influence the estimated relationship between the dependent variable and other independent variables.” ABA Section of Antitrust Law, *Econometrics: Legal, Practical, and Technical Issues* § 5.B.1.a (2d ed. 2014).

(1) February 2001 - July 2005; (2) August 2005 - June 2007; and (3) July 2007 - December 2010. (*Id.*) His rebuttal report slightly revises these conspiracy periods. The rebuttal report divides Winn-Dixie's damages into four conspiracy periods by separating the damages incurred from July 2007 to December 2010 by mushroom provider; it defines the third conspiracy period as Winn-Dixie's purchases from Oakshire, July 2007 - December 2010, and the fourth conspiracy period as Winn-Dixie's purchases from Modern, July 2010 - December 2010. (Leffler Rebut. Rpt. ¶ 14, Table 1.) Dr. Leffler opines that Winn-Dixie incurred overcharges of: (1) 2.9% for the first conspiracy period; (2) 5.3% for the second conspiracy period; and (3) 12% for the third and fourth conspiracy periods. (*Id.*)

Dr. David's expert report offers a variety of critiques of Dr. Leffler's opinions. His opinions can be broadly summarized as criticisms that Dr. Leffler's regression model double counts certain transactions, fails to control for key industry factors, and inappropriately relies on sales from non-EMMC members and anticompetitive conduct after 2005. (David Rpt. ¶¶ 54-80.) Dr. Leffler accepts Dr. David's first criticism concerning double-counted transactions and offers a revised opinion of total overcharge damages after removing those duplicative transactions. (Leffler Rebut. Rpt. ¶ 14, Table 1.) The rebuttal report responds to Dr. David's remaining criticisms by defending Dr. Leffler's original opinions.

Before turning to the merits of the motions, the Court will briefly summarize its other relevant opinions in this action, as these opinions are relevant to whether the proposed expert testimony fits the case.

### **C. The Court's Previous Decisions in this Action**

On July 15, 2020, the Court denied Plaintiffs' motion for leave to file a Second Amended

Complaint. (Document Nos. 280, 281.) Plaintiffs' First Amended Complaint alleges:

[s]tarting on or about January 1, 2001 and continuing until at least through 2008, the EMMC...engaged in an overarching scheme to unlawfully fix the price of fresh *Agaricus* mushrooms in the United States by agreeing to set floor (minimum) prices for mushrooms and by agreeing to collectively fund and effectuate the purchase or lease of mushrooms farms for the express purpose of reducing output, removing existing available production capacity from the market and artificially raising prices.

(FAC ¶ 3.) Six days before the close of fact discovery, Plaintiffs sought leave to amend the complaint to allege that the conspiracy period continued through December 31, 2010 and that "as part of this scheme, beginning no later than October of 2005, the EMMC added a 'non-compete' policy whereby members agreed not to compete against another member so as to take business away from a member or reduce a member's profit margin." (Document No. 266, Ex. 1 ¶¶ 1, 3, 10.) The Court denied leave to amend the Complaint because Plaintiffs' delay in seeking to extend the conspiracy period and assert this new theory of antitrust liability was both prejudicial and undue. The Court also denied Plaintiffs' motion for reconsideration on this issue, or in the alternative, for clarification that Winn-Dixie could move at trial to conform the pleadings to the evidence, finding that Rule 15(b) was inapplicable because no objection to evidence or trial had yet occurred and Defendants had not consented to trial on a non-compete theory of liability. (Document No. 297.)

On September 1, 2020, the Court granted partial summary judgment to Defendants for Bi-Lo's claims for damages. (Document Nos. 298, 299.) The Court found that Bi-Lo was an indirect purchaser from the alleged conspiracy, and therefore, was not an injured party eligible to recover damages pursuant to *Illinois Brick Co. v. Illinois*, 431 U.S. 720 (1977). On May 12, 2021, the Court denied summary judgment on Winn-Dixie's claims for damages, finding that there was a genuine dispute of material fact as to whether Winn-Dixie can recover damages for its mushroom

purchases from non-party, Oakshire Mushrooms Sales, LLC (OMS). (Document Nos. 347, 348.) Defendants' liability and Winn-Dixie's damages are outstanding issues to be resolved at trial.

## II. STANDARD OF REVIEW

Federal Rule of Evidence 702 provides that a qualified expert witness may offer opinion testimony if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. In essence, "Rule 702 embodies three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit." *Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d Cir. 2000).

"*Daubert* holds that admissibility under Rule 702 is governed by Rule 104(a), which requires the judge to conduct preliminary factfinding, to make 'a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid,' ...." *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 743 (3d Cir. 1994) ("*Paoli II*") (quoting *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 592-93 (1993)). The burden is on the proponent to establish admissibility by a preponderance of the evidence. *Padillas v. Stork-Gamco, Inc.*, 186 F.3d 412, 418 (3d Cir. 1999). However, "[t]his does not mean that plaintiffs have to prove their case twice—they do not have to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are *correct*, they only have to demonstrate by a preponderance of evidence that their opinions are reliable." *Paoli II*, 35 F.3d at 744. A "merits standard of correctness," is "a higher bar than what Rule 702 demands." *Karlo v. Pittsburgh Glass Works*,

*LLC*, 849 F.3d 61, 83 (3d Cir. 2017).

A court’s focus in determining admissibility of an expert’s testimony is on “principles and methodology, not on the conclusions generated by the principles and methodology.” *In re TMI Litig.*, 193 F.3d 613, 665 (3d Cir. 1999), amended, 199 F.3d 158 (3d Cir. 2000). “The test of admissibility is not whether a particular scientific opinion has the best foundation, or even whether the opinion is supported by the best methodology or unassailable research. Rather, the test is whether the ‘particular opinion is based on valid reasoning and reliable methodology.’” *Id.* (quoting *Kannankeril v. Terminix Int’l Inc.*, 128 F.3d 802, 806 (3d Cir. 1997)). However, a court must be mindful that, “the reliability analysis [required by *Daubert*] applies to all aspects of an expert’s testimony: the methodology, the facts underlying the expert’s opinion, [and] the link between the facts and the conclusion.” *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 291 (3d Cir. 2012) (quoting *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 155 (3d Cir.1999)) (alterations in original).

In addition to reliability, district courts must also assess Rule 702’s independent requirement of “fit”—that the expert’s opinion will help the trier of fact to understand the evidence or to determine a fact in issue. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 591 (1993). “Thus, even if an expert’s proposed testimony constitutes scientific knowledge, his or her testimony will be excluded if it is not scientific knowledge *for purposes of the case.*” *Paoli II*, 35 F.3d at 743.

### **III. DISCUSSION**

Plaintiffs and Defendants each seek to exclude the testimony of the other’s proposed expert. Neither side has challenged the experts’ qualifications. The Court will first consider



Defendants' motion to exclude Dr. Leffler's expert testimony on the grounds that his opinions are unreliable and not relevant to the claims. The Court concludes that Dr. Leffler's methodology is reliable, but some of his opinions will be excluded because they do not fit the facts of the case. Then the Court will consider and deny Plaintiffs' motion to exclude Dr. David's rebuttal expert testimony on the grounds that his opinions are untested, based upon unreliable methodology and data, and their probative value is substantially outweighed by its prejudicial effect.

**A. Defendants' Motion to Preclude Dr. Leffler's Proposed Expert Testimony**

Defendants argue that Dr. Leffler's proposed testimony should be excluded for two reasons. First, Defendants argue that Dr. Leffler's multiple regression analysis is flawed in multiple ways, and therefore, his methodology is unreliable. Second, Defendants argue that Dr. Leffler's opinions do not fit the facts of the case because he relies on damages that resulted from a non-compete theory of anticompetitive conduct. The Court will consider each of these arguments in turn.

Further, Defendants argue that Dr. Leffler's damages estimate does not fit the facts of the case because he relies upon indirect purchases for which there are no recoverable damages. (Defs.' Mem. in Supp. of Mot. Pursuant to Fed. R. of Evid. 702 [Defs.' Mot.] at 6-9.) After Dr. Leffler produced his initial report, the Court ruled that Bi-Lo was an indirect purchaser, which means it is not entitled to recover damages. Therefore, the Court agrees that Dr. Leffler's damages estimate pertaining to Bi-Lo must be excluded because it will not help the trier of fact determine any fact in dispute.<sup>3</sup> However, this Court has already ruled that there is a disputed question of fact as to

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<sup>3</sup> In light of the Court's opinion that Bi-Lo is ineligible for overcharge damages, Dr. Leffler "re-estimated the regression analysis using only Winn-Dixie data[,]" and excluding Bi-Lo

whether Winn-Dixie may recover damages for its purchase of mushrooms from non-party OMS, based on application of the control exception to the direct purchaser rule. Thus, the Court will not exclude any of Dr. Leffler's damages opinions for Winn-Dixie merely because they are premised on Winn-Dixie's purchases from OMS.

*1. Reliability of Dr. Leffler's Multiple Regression Analysis*

Dr. Leffler estimated the overcharge damages in this case using a multiple regression analysis with fixed-effects. (Leffler Rpt. ¶ 55.) A multiple regression model measures the impact of two or more independent variables—such as demand, production costs, or conspiratorial conduct—on a dependent variable. Here, Dr. Leffler's dependent variable is the price of fresh *Agaricus* mushrooms. The seven independent variables in his regression model are: (1) wage rates for farm workers; (2) the price of alfalfa hay in Pennsylvania; (3) the cost of electricity to industrial customers in Pennsylvania; (4) the cost of fuel oil in Pennsylvania; (5) personal income per capita in the states where Plaintiffs bought mushrooms; (6) consumption of fresh vegetables as a share of all food consumption at home; and (7) the volume of purchases of a particular mushroom product at a particular time. (Leffler Rpt. ¶ 54.) The model also includes fixed-effects variables of a conspiracy period indicator and mushroom product indicator.<sup>4</sup> (*Id.*)

“There is no dispute that when used properly multiple regression analysis is one of the mainstream tools in economic study and it is an accepted method of determining damages in

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purchases. (Leffler Decl. ¶ 5.) The result was an increase to Winn-Dixie's overcharges that, according to Dr. Leffler, was not statistically significant and did not meaningfully change Dr. Leffler's opinions. (*Id.*)

<sup>4</sup> “Fixed-effects models often use dummy variables to measure the effect of interest, where a dummy variable is a variable that takes the value of 1 for observations in the subgroup, time period, or event of interest, and 0 for all other observations.” ABA Section of Antitrust Law, *supra*, § 5.B.1.a.

antitrust litigation.” *In re Flat Glass Antitrust Litig.*, 191 F.R.D. 472, 486 (W.D. Pa. 1999); *see Petruzzi’s IGA Supermarkets, Inc. v. Darling-Delaware Co.*, 998 F.2d 1224, 1238 (3d Cir. 1993) (“the scientific method used by the economists, multiple regression analysis, is reliable.”). Defendants do not generally dispute that a multiple regression analysis is a proper methodology to estimate antitrust injury and overcharge damages. Instead, Defendants argue the particulars of Dr. Leffler’s multiple regression model are flawed. Specifically, Defendants argue that Dr. Leffler’s multiple regression analysis suffers from: (1) omitted control variable bias; (2) ineffective control variables; (3) over-fitting; (4) a limited benchmark period; and (5) counterintuitive results. Defendants made several of these same arguments when they sought to exclude Dr. Leffler’s testimony in the historic opt-out cases. For many of the same reasons Judge O’Neill explained in his well-reasoned opinion, the Court is not persuaded that Defendants’ criticisms of Dr. Leffler’s regression model warrant exclusion of his testimony as unreliable. *See In re Mushroom*, 2015 WL 5775600 (E.D. Pa. Aug. 5, 2015).

*a. Omitted Control Variable Bias*

Defendants argue that Dr. Leffler’s regression model fails to include three distinct control variables, and therefore, is an unreliable methodology. Defendants argue that Dr. Leffler’s model fails to account for: (1) the closing of certain mushroom farms; (2) the Dole brand mushroom sales price premium; and (3) price discounts pursuant to sales contracts.

The Court is unpersuaded by Defendants’ arguments that Dr. Leffler’s failure to account for these variables renders his testimony inadmissible. “[T]he omission of variables from a regression analysis may render the analysis less probative than it otherwise might be[.]” but, absent some other infirmity, “an analysis which accounts for the major factors” likely to influence the

result is admissible evidence. *Bazemore v. Friday*, 478 U.S. 385, 400 (1986). “Normally, failure to include variables will affect the analysis’ probativeness, not its admissibility.” *Id.* Still, the court in *Bazemore* noted, “[t]here may, of course, be some regressions so incomplete as to be inadmissible as irrelevant[.]” *Id.* at 400 n.10. In the context of price-fixing cases, other district courts have recognized that “[m]erely pointing to economic conditions that may affect the dependent variable is not enough to call into question the reliability of an econometric model.” *Resco Prod., Inc. v. Bosai Mins. Grp.*, Civ. A. No. 06-235, 2015 WL 5521768, at \*5 (W.D. Pa. Sept. 18, 2015) (quoting *In re Linerboard Antitrust Litig.*, 497 F. Supp. 2d 666, 678 (E.D. Pa. 2007)); accord *In re Polypropylene Carpet Antitrust Litig.*, 93 F. Supp. 2d 1348, 1365 (N.D. Ga. 2000). Rather, a party challenging a regression model’s admissibility for omission of variables, “must introduce evidence to support its contention that the failure to include those variables would change the outcome of the analysis.” *In re Indus. Silicon Antitrust Litig.*, Civ. A. No. 95-1131, 1998 WL 1031507, at \*3 (W.D. Pa. Oct. 13, 1998); accord *Resco*, 2015 WL 5521768, at \*5, 10 (W.D. Pa. Sept. 18, 2015).

*i. Farm Closures*

Defendants argue first that among the methodological problems with Dr. Leffler’s regression model is its failure to account for farm closings over his ten-year damages period. (Defs.’ Mot. at 11.) Dr. David’s expert report discusses various mushroom farm closures that occurred between 2000 and 2009 and opines that Dr. Leffler does not account for how these farm closures may have affected pricing since there are no variables in the model to control for farm closures. (See David Rpt. ¶¶ 17-21, 78.) But because Dr. David did not create or test his own regression model that included a control variable for farm closures, Defendants have not shown

that inclusion of this variable would have changed the results of the regression analysis.

Dr. Leffler responds that changes in supply resulting from farm closures are the result of price fluctuation through the application of supply and demand curves, meaning that farm closures are the result of price decreases. (Leffler Rebut. Rpt. ¶ 32.) As a result, Dr. Leffler argues that farm closures are already accounted for in the regression model because they are an “endogenous” variable (*id.* p. 16 n.56), meaning that they are “a factor...driven by ‘economically driven changes in supply’ that are accounted for in his model.” *In re Mushroom*, 2015 WL 5775600, at \*4 n.2 (quoting Civ. A. No. 06-620, Document No. 664 at 38). Judge O’Neill previously analyzed this same critique in the historic opt-out cases and concluded that, “Dr. Leffler adequately established for purposes of the reliability inquiry that a separate control variable for farm closings is not necessary where such closings are driven by price pressure rather than some independent intervening event such as a natural disaster.” *Id.* at \*4. Similarly, here, the Court finds that Defendants’ argument concerning an omitted variable for farm closures goes to the ultimate probativeness of Dr. Leffler’s regression model but does not render it so incomplete as to be irrelevant.

*ii. Dole Brand Premium*

Defendants also argue that the sales price premium for Dole brand mushrooms was not adequately accounted for in the regression analysis. (Defs.’ Mot. at 9-10.) The Dole brand issue is unique to Winn-Dixie’s purchases from OMS and, therefore, was not relevant to Dr. Leffler’s opinions for the historic opt-out plaintiffs. From 1999 through 2003, Winn-Dixie’s mushroom suppliers were EMMC members Monterey and Modern. (Leffler Rpt. ¶ 35.) In 2004, Winn-Dixie began purchasing mushrooms from OMS, which became Winn-Dixie’s only mushroom supplier

through 2010. (*Id.*) Winn-Dixie signed a two-year sales agreement with OMS in 2005 (Pls.’ Opp’n Ex. 6), and a three-year sales agreement with OMS in 2007. (Pls.’ Opp’n Ex. 7.) OMS had an exclusive license to sell mushrooms under the Dole brand, and it purchased mushrooms from suppliers, including EMMC members Country Fresh Mushroom Co., South Mill Mushroom Sales, Inc., and Oakshire Mushroom Farm, Inc., to re-sell under the Dole brand. (*See* David Rpt. ¶ 35.) Therefore, Dr. Leffler’s first conspiracy period for Winn-Dixie’s mushroom purchases, between February 2001 and July 2005, includes some Dole brand purchases from OMS and other non-Dole brand purchases from Monterey or Modern. Dr. Leffler’s second and third conspiracy periods are exclusively for Winn-Dixie’s purchases from OMS pursuant to the 2005 and 2007 sales agreements. (Leffler Rpt. ¶ 54 n.127.)

Dr. David opines that Winn-Dixie may have paid OMS as much as a nine percent premium for Dole mushrooms compared to the prices it had previously paid for mushrooms from Monterey or Modern. (David Rpt. ¶ 79.) Dr. David bases this conclusion on the fact that OMS pays Dole a royalty of three percent of net sales for the use of the Dole brand, (*id.* ¶ 35 n.99), and OMS had increased freight costs of approximately six percent compared to Monterey or Modern. (*Id.* ¶ 35 n.103.) As a result, Dr. David states that the Dole premium “could explain most or all” of Dr. Leffler’s alleged overcharges. (*Id.* ¶ 79.) Defendants argue that because Winn-Dixie’s purchases of Dole brand mushroom began in 2004, all of those purchases occurred during the conspiracy conduct period (2001-2010), as opposed to the benchmark period (1999-2000). (David Decl. ¶ 3 n.5.) Therefore, Defendants argue Dr. Leffler’s model cannot distinguish between the premium paid for Dole products and overcharges resulting from the alleged conspiracy. (David Rpt. ¶ 79.)

In response, Dr. Leffler argues that he adequately accounted for the Dole brand mushroom

purchases because he included a Dole indicator variable in his product definition “using a fixed-effects methodology.” (Leffler Rebut. Rpt. ¶ 31.) Dr. Leffler’s regression model includes a set of 0/1 indicator variables for each type of mushroom product. (Leffler Rpt. ¶ 54.) Dr. Leffler applied a Dole indicator variable to approximately 15 percent of Winn-Dixie’s purchases from OMS, depending on whether the name of the purchase product indicated it was a “Dole” product. (Leffler Decl. ¶ 2.) Dr. Leffler argues that his analysis,

bases any Dole premium on differences in prices between Dole branded purchases and Monterey and Modern purchases in Conspiracy period 1. The overcharges in Conspiracy Periods 2 and 3 are then measured by increases in the prices of Dole branded mushrooms, given any premium, that are not explained by the supply and demand control variables.

(*Id.* ¶ 3.)

However, the parties dispute what proportion of OMS’s sales to Winn-Dixie were Dole brand mushrooms. Defendants argue that all mushrooms Winn-Dixie purchased from OMS were Dole brand. (David Decl. ¶ 5.) As a result, Dr. David asserts that no Dole indicator variable could separate the Dole premium from alleged overcharges because any Dole indicator variable, “would be indistinguishable from...Dr. Leffler’s second and third damages periods.” (*Id.*) Defendants reference the sales agreements between Winn-Dixie and OMS to argue that all mushroom sales pursuant to those agreements were Dole brand, but they do not cite any specific provisions of those agreements stating that all mushrooms sold under the agreements were Dole brand. (Defs.’ Mot. at 9 n.4.) A cursory review of the sales agreements demonstrates that they describe the products sold pursuant to the agreement as “Oakshire Dole Mushrooms” (Pls.’ Opp’n Ex. 6), or refer to OMS as “Dole Mushrooms” (Pls.’ Opp’n Ex. 7), and both agreements bear the “Dole” brand logo. Even so, Dr. Leffler argues that these agreements present no conclusive evidence that all OMS

sales were Dole brand mushrooms. (Leffler Decl. ¶ 2 n.3.) Nevertheless, Dr. Leffler recreated the regression analysis labelling all OMS sales to Winn-Dixie as “Dole”, and the result was to increase the overcharge by less than one percent, which, according to Dr. Leffler, is not statistically significant. (*Id.* ¶ 4.)

The Court concludes that Dr. Leffler’s reliance on the description of “Dole” in the product name to apply a Dole indicator variable to only a fraction of Winn-Dixie’s purchases from OMS contains sufficient factual basis in the record. “A party confronted with an adverse expert witness who has sufficient, though perhaps not overwhelming, facts and assumptions as the basis for his opinion can highlight those weaknesses through effective cross-examination.” *Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir. 2002). The contested issue of whether all of Winn-Dixie’s purchases from OMS were Dole mushrooms should appropriately be resolved by the trier of fact, so the Court will not exclude Dr. Leffler’s testimony on this basis. Dr. Leffler has also articulated how his regression model took the Dole premium into account, despite there being no Dole mushroom purchases during the benchmark period. (Leffler Decl. ¶ 3.) Defendants have not responded to this argument or offered any suggestion of how Dr. Leffler should have altered his regression analysis to take the Dole premium into account. Moreover, because Dr. David did not create or test his own regression model that included a control variable for the Dole premium, Defendants have not shown that inclusion of this variable would have changed the results of the regression analysis. The Court finds the alleged omission or ineffectiveness of the Dole premium variable goes to the regression model’s probative value, not its admissibility, since it does not render the model so incomplete as to be irrelevant. Dr. Leffler’s argument concerning the Dole premium will be subject to cross-examination at trial.



*iii. Price Discounts*

The final control variable Dr. David contends is missing from Dr. Leffler's regression model reflects contract price discounts. (David Rpt. ¶ 77.) Winn-Dixie's sales agreements with OMS set purchase prices, but the agreements also provided for a certain quantity of purchases at a discounted price. (*Id.* ¶ 39; Pls.' Opp'n Ex. 6-7.) Dr. David argues that Winn-Dixie purchased significant quantities of mushrooms at discounted rates but there is not a control variable for this feature of the transactions in Dr. Leffler's regression model. (David Rpt. ¶ 77.) Dr. Leffler responds that because he aggregates the data at a monthly level, his model adequately captures the variation that results from contract discounting. (Leffler. Rebut. Rpt. ¶ 20 n.29; *see* Leffler Rpt. ¶ 54.) As with farm closures and the Dole premium, the Court is not persuaded that the absence of a control variable for contract price discounts renders Dr. Leffler's methodology unreliable. Defendants may cross examine Dr. Leffler concerning this alleged deficiency at trial.

*b. Ineffective Control Variables*

Next, Defendants argue Dr. Leffler's methodology is unreliable because the coefficients on the conspiracy-period control variables indicate that the regression model is flawed. "Coefficients in multiple regression models indicate the degree of correlation between the dependent variable and each independent variable." ABA Section of Antitrust Law, *supra*, Appendix and Glossary.C.3. Dr. David explains that, ordinarily, economic theory would predict that prices should be correlated with production cost—meaning that if costs increase, prices should increase, if all other factors are held constant. (David Rpt. ¶ 76.) Dr. David states that both of Dr. Leffler's variables for heating oil costs (contemporaneous and lagged) show a negative correlation with price, and only five of Dr. Leffler's eleven variables have coefficients that demonstrate

statistically significant results, which Dr. David opines indicates that the regression model is not reliable. (*Id.*)

In response, Dr. Leffler contends that there are only seven total supply and demand variables, since contemporaneous and lagged values for the same variable are combined. (Leffler Rebut. Rpt. ¶ 29 n.50.) According to Dr. Leffler, five of the seven variables in his model affect Winn-Dixie's prices as predicted by economic theory; the exceptions with negative coefficients are the costs of hay and heating oil. (*Id.* ¶ 29.) Dr. Leffler explains that excluding either of these variables with a negative coefficient does not significantly change the outcome of the model, so it is unlikely that their inclusion renders the model unreliable. (*Id.* ¶¶ 29 n.52, 30 n.53.) He further states that an increase in the totality of his cost variables resulted in a statistically significant increase in prices, which validates the reliability of his model. (*Id.* ¶ 30; *see* Leffler Rpt. ¶ 55.)

Finally, Dr. Leffler explains that the cost variables of heating oil and electricity are highly correlated with one another, which can result in a phenomenon known as multicollinearity. (Leffler Rebut. Rpt. ¶ 30.) According to one treatise on regression models, “multicollinearity does not indicate a failure of the model. Instead, it reflects the fact that there is insufficient independent variation in the variables included in the data set.” ABA Section of Antitrust Law, *supra*, § 6.C.2.b. Dr. David argues that Dr. Leffler “did not demonstrate...that multicollinearity was the cause of the non-sensical results....” (David Rpt. ¶ 76 n.153.)

Judge O'Neill assessed many of these same arguments in the historic opt-out cases. There, Judge O'Neill found that the cost control variables Dr. Leffler had chosen had “at least a logical relationship to mushroom prices[,]” and as a result, Dr. Leffler had shown that “his model is not equivalent to one that functionally has no cost control variables at all....” *In re Mushroom*, 2015

WL 5775600, at \*5. As a result, in the historic opt-out cases, Dr. Leffler’s choice of cost control variables, including electricity, heating fuel, hay, and labor—which are many of the same control variables Dr. Leffler used in his regression model in this case (Leffler Rpt. ¶ 54)—did not present a reason to exclude his regression model. *In re Mushroom*, 2015 WL 5775600, at \*5. Judge O’Neill noted, “[w]hile there may be questions as to the probativeness of Dr. Leffler’s damages models, they can be subjected to vigorous cross-examination at trial.” *Id.* The Court agrees with this sound reasoning and will not exclude Dr. Leffler’s model because of his choice of cost control variables or the resulting negative coefficients for the cost of heating oil or hay. For purposes of the *Daubert* analysis, Dr. Leffler has adequately shown that his conspiracy-period control variables create a reliable multiple regression model.

*c. Over-fitting*

Defendants next argue that Dr. Leffler’s use of a multi-variable regression analysis is an inappropriate methodology because it suffers from over-fitting. Dr. David describes “over-fitting” as a violation of a cardinal rule in econometrics that “the number of independent observations should be substantially more than the number of independent variables for a regression analysis to be reliable.” (David Rpt. ¶ 73 (citing Frank E. Harrell, *Regression Modeling Strategies* (2013).) Here, Dr. David argues that Dr. Leffler’s regression model overfits because it incorporates far fewer price observations than it initially appears to include. The regression model “treats the average price for each product in a given month as the unit of observation, and further treats consecutive months as independent observations.” (*Id.*) However, Dr. David argues that prices for Winn-Dixie’s purchases did not vary monthly because they were negotiated according to contracts with OMS in 2004, 2005, and 2007. (*Id.*) For Winn-Dixie’s purchases from other EMMC members

Monterey and Modern, Dr. David similarly claims that these prices were negotiated for one-year periods. (*Id.* ¶¶ 34, 73; *see id.* ¶ 39.) Therefore, Defendants argue, Winn-Dixie’s purchase prices on a consecutive monthly basis were not independent observations, “rather the data indicate that there were no more than approximately ten unique price observations for each product purchased by Winn-Dixie....” (*Id.* ¶ 73.) Defendants argue Winn-Dixie’s price data is too limited to generate valid results because Dr. Leffler’s regression model uses fourteen independent variables,<sup>5</sup> which is not substantially fewer than the number of price observations.

Dr. Leffler disagrees with Defendants’ factual premises and methodological argument. He states that Winn-Dixie purchased mushrooms at 79 unique prices for sliced products and 75 unique prices for whole mushrooms. (Leffler Rebut. Rpt. ¶ 19.) Moreover, Dr. Leffler explains that his use of the fixed-effects methodology with an indicator variable for each type of product means that the independent variable coefficients in his regression are based on estimates of price variation within each product. (*Id.* ¶ 20.)

Based on this explanation, the Court concludes that Dr. Leffler has provided good grounds for his use of average monthly prices, which should be tested in the adversarial process. While Dr. David criticizes that there are only “ten unique price observations *for each product*[,]” (David Rpt. ¶ 73 (emphasis added)), he fails to consider how many total products are included in the regression. Nor does he explain why Dr. Leffler’s fixed-effects methodology does not resolve this concern of over-fitting. Moreover, the factual dispute between the experts of how many unique price observations are in the relevant data should be appropriately resolved by the factfinder. Thus, even

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<sup>5</sup> Dr. Leffler states that his model uses only seven variables, since when a contemporaneous and lagged value of the same variable are included, the sum of those coefficients are the expected sign for that variable. (Leffler Rebut. Rpt. ¶ 29 n.50.)

if Defendants' over-fitting critique is a potential methodological flaw, such a flaw should go to the probativeness of Dr. Leffler's testimony but does not render the regression model unreliable. *See In re Urethane Antitrust Litig.*, 166 F. Supp. 3d 501, 505-06 (D.N.J. 2016). In sum, Defendants' arguments concerning over-fitting can be addressed on cross-examination.

*d. Limited Benchmark Period*

Defendants next argue that Dr. Leffler's regression model is unreliable because he has attempted to model a ten-year period of alleged conspiracy using only two years of pre-conspiracy data as a benchmark. (David Rpt. ¶ 74.) Dr. Leffler's regression model assesses data from January 1999 through December 2010. (Leffler Rpt. ¶ 51.) The data for January 1999 through January 2001 reflects a competitive benchmark period, whereas the data for February 2001 through December 2010 is assigned to one of the conspiracy periods. (*See id.* ¶ 54.) Dr. Leffler explains that his benchmark period was only two years because this was the only data available for his analysis, but even so, he found statistically significant overcharges despite these limitations in the data. (Leffler Rebut. Rpt. ¶ 21.) Dr. Leffler performed additional analysis to confirm that the relationship between cost variables and price did not change between the benchmark and conspiracy periods, and his demand variables did not show a statistically significant difference between the coefficients in the benchmark and conspiracy periods (with the exception of one conspiracy period for the fresh vegetable consumption variable). (*Id.* ¶ 22.) He argues these results prove the reliability of the two-year benchmark period in his model.

Dr. David states that practitioners generally recommend a benchmark period of similar length to the treatment period, and, as a result, Dr. Leffler's benchmark period is unreliable. (David Rpt. ¶ 74.) Dr. David explains that in situations with a disproportionately short benchmark period,

“if market conditions change over time, the model may not be able to accurately predict the relationship between the independent and dependent variables, leading again to unreliable results.” (*Id.*) However, Dr. David has not pointed to any specific market conditions that changed over the course of the conspiracy period which would render Dr. Leffler’s model unreliable. In light of Dr. Leffler’s empirical assessments described above, Defendants’ speculative criticism is not sufficient to justify exclusion of Dr. Leffler’s regression model as an unreliable methodology.

*e. Counterintuitive Results*

Finally, Defendants argue that “[t]he lack of reliability of Dr. Leffler’s approach is evident from a straightforward examination of his results.” (David Rpt. ¶ 75.) Specifically, Defendants point to Dr. Leffler’s estimates that the percentage of overcharges increased in each consecutive conspiracy period, as follows: (1) 2.9% for February 2001- July 2005; (2) 5.3% for August 2005 - June 2007; and (3) 12% for July 2007 - December 2010. (*See* Leffler Rebut. Rpt. ¶ 14, Table 1.) Defendants argue that these overcharges are counterintuitive, since Dr. Leffler’s “highest overcharges are found at the end of [the conspiracy] period...a time during which the EMMC’s minimum pricing requirements had been eliminated and the EMMC’s membership controlled less than half of the relevant market....” (David Rpt. ¶ 75; *see id.* ¶ 65.)

It bears remembering that a court’s focus in determining admissibility of an expert’s testimony is on “principles and methodology, not on the conclusions generated by the principles and methodology.” *In re TMI Litig.*, 193 F.3d at 665 (3d Cir. 1999). Indeed, Judge O’Neill considered and rejected this argument in the historic opt-out cases for precisely this reason, finding that “[this] argument is not consistent with the legal standard on *Daubert*....” *In re Mushroom*, 2015 WL 5775600, at \*7 (citing *In re TMI Litig.*, 193 F.3d at 665). This Court agrees with Judge

O'Neill that the counterintuitive trajectory of Dr. Leffler's overcharge estimates is not a sufficient reason to exclude the testimony as unreliable. Plaintiffs have established that Dr. Leffler's regression model, and its application to Winn-Dixie's purchase data, are based on good grounds and employ valid reasoning and reliable methodology. Therefore, the Court will not find Dr. Leffler's opinions inadmissible simply because Defendants deem his conclusions counterintuitive.<sup>6</sup>

## 2. *Fit of Damages Premised on a Non-Compete Theory*

In addition to reliability, district courts must also assess Rule 702's independent requirement that the expert's opinion will help the trier of fact to understand the evidence or determine a fact in issue. Fed. R. of Evid. 702(a); *see United States v. Bennett*, 161 F.3d 171, 182 (3d Cir. 1998) ("the trial judge has broad discretion to admit or exclude expert testimony, based upon whether it is helpful to the trial of fact."). This inquiry goes primarily to relevance and has been referred to as "fit" of the expert opinion. *Daubert*, 509 U.S. at 591. Here, Defendants argue Dr. Leffler's damages estimate does not fit the facts of the case because it is premised on an alleged non-compete agreement among EMMC members. (Defs.' Mot. at 10; Defs.' Reply in Supp. of Mot. Pursuant to Fed. R. of Evid. 702 [Defs.' Reply] at 2-4.) The Court previously denied

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<sup>6</sup> Separately, Defendants also argue Dr. Leffler's model is unreliable because of his "failure to account for the substantially declining market share due to resignation of EMMC members...." (Defs.' Mot. at 10.) Specifically, Dr. David argues that because there were significant resignations from the EMMC beginning in 2002, "there is no evidence of market power beginning at least as early as 2006." (David Rpt. ¶ 67; *see id.* ¶¶ 66, 68.) Defendants also argue that Dr. Leffler's third conspiracy period should be excluded because it reflects Winn-Dixie's purchases after OMF and Monterey had resigned from the EMMC. (*See id.* ¶¶ 58-62.) Both of these additional arguments only implicate Dr. Leffler's assessment of damages after 2005. In light of the Court's decision in Section III.A.2 *infra* to exclude damages premised on anticompetitive conduct after August 2005, the Court need not address these additional arguments concerning reliability.

Plaintiffs’ leave to amend the Complaint to assert a theory of liability premised on a non-compete agreement. (Document Nos. 280, 281, 297.) As a result, the Court agrees that any damages estimates premised on a non-compete agreement theory of liability, which was not pleaded, will not assist the trier of fact and, therefore, are not admissible. *Cf. In re Urethane*, 166 F. Supp. 3d at 511 (D.N.J. 2016) (declining to exclude damages for lack of fit because “the models here do not seek to measure damages stemming from an antitrust impact that has been rejected or is otherwise no longer at issue.”). However, the parties disagree as to what portions of Dr. Leffler’s damages estimate, if any, are impacted by the Court’s prior ruling denying leave to assert a non-compete theory of liability.

Dr. Leffler’s initial report in this case described his opinions concerning the timeline of transition from the EMMC minimum pricing policy to a non-compete agreement.

The EMMC’s mandatory minimum pricing policies were in effect through August of 2005 when they were suspended by agreement of the members. Immediately after the suspension of the mandatory minimum pricing policy, the EMMC entered into a ‘noncompete’ period during which members agreed not to compete with another member’s business.

(Leffler Rpt. ¶ 26 (footnote omitted).) Similarly, in the historic opt-out cases, Dr. Leffler opined that EMMC minimum pricing was suspended in 2005. At the *Daubert* hearing in the historic opt-out cases, Dr. Leffler testified that the *impact* of the “minimum pricing period” extended until June 2007, which was the end date of a sales contract one of the opt-out plaintiffs made in 2005, while EMMC minimum pricing was in effect. (Civ. A. 06-620, Document No. 664 at 57:9-58:3.) Dr. Leffler explained that the minimum pricing impact period was “longer than the period of the minimum pricing rules[,]” because of the two-year contract which began before EMMC’s suspension of minimum pricing. (*Id.* at 58:4-11.) In that case, Dr. Leffler testified that the damages



impact period beginning in July 2007 was “the non-compete impact period.” (*Id.* at 58:18-59:4.) Judge O’Neill concluded that the possibility of this alleged non-compete agreement was a “sufficient rationale for [Dr. Leffler’s] decision to include a conduct period after the official cessation of EMMC minimum pricing agreement.” *In re Mushroom*, 2015 WL 5775600, at \*7 (describing “the formal dissolution of the minimum pricing policy in [redacted text] 2005.”).

Despite Dr. Leffler’s statement in his initial report that EMMC minimum pricing was suspended in August 2005 and a non-compete period began immediately thereafter, Plaintiffs now argue that there is “a sufficient factual basis for the fact that the EMMC minimum pricing and policies were in effect from 2006 through 2009.” (Pls.’ Resp. in Opp’n to Defs.’ Mot. to Exclude [Pls.’ Resp.] at 15.) In opposition to the instant motion, Dr. Leffler states, “the facts...indicate continuing anticompetitive acts after July 2005. I understand Plaintiffs will offer evidence that the minimum price policy continued in effect after July 2005. I cited this evidence in my Rebuttal Report.” (Leffler Decl. ¶ 7 (citing Leffler Rebut. Rpt. p. 8 n.23).) Plaintiffs rely on three pieces of evidence to support this new conclusion.

First, Plaintiffs present the declaration of Michael Cardile stating that when Cardile Mushrooms, Inc. was a member of EMMC, during the period January 2001 through 2009, “there was never a time when either the minimum pricing or the non-compete was not in place.” (Pls.’ Ex. 17 [Cardile Decl.] ¶¶ 2, 4; *accord* Leffler Rebut. Rpt. p. 8 n.23.) Relying on this statement, Plaintiffs argue that because Defendants have taken the position that the EMMC never adopted any non-compete agreement, minimum pricing must have continued through 2009. (Pls.’ Resp. at 10 (citing Pls.’ Opp’n Ex. 3; Document No. 268 at n.1).) Second, Plaintiffs point to a document stating that in October 2005 the EMMC discussed “a transition from non-compete to price

management.” (Pls.’ Opp’n Ex. 4 at 1; *accord* Leffler Rebut. Rpt. p. 8 n.23.) Finally, Plaintiffs cite an EMMC Policies document “[l]ast revised on December 6, 2005” stating that a new section entitled “Non-compete” was “to be voted December 13, 2005[.]” (Pls.’ Opp’n Ex. 5 at 4.) The non-compete section states that “[t]he non-compete policy is intended to be used as a temporary tool to create stability among members during periods of transition. For example, as a bridge to the time when 80% coop market share is achieved and minimum pricing implemented.” (*Id.*) This document further describes the terms of the non-compete policy and states that the “[n]on-compete will not be in effect when minimum pricing is in place except for brief periods of time...during a transition to new pricing. . . .” (*Id.*; *accord* Leffler Rebut. Rpt. p. 8 n.23.) Plaintiffs therefore contend that the EMMC minimum pricing policy must have resumed after December 13, 2005 and was in place through the end of 2009, or at least through the start of the third conspiracy period in 2007. (Pls.’ Resp. at 16.) As a result, Plaintiffs argue that the full scope of Dr. Leffler’s damages estimate is premised on EMMC minimum pricing, rather than an alleged non-compete agreement, and therefore is relevant to this case. At the very least, Plaintiffs argue, the end date of EMMC minimum pricing “involves a factual dispute not suitable for resolution by a *Daubert* motion, and instead, goes to the weight of his opinion and regression model and not their admissibility.” (Pls.’ Resp. at 17.)

The Court is not persuaded by Plaintiffs’ forage for evidence in support of this new argument. “It is an abuse of discretion to admit expert testimony which is based on assumptions lacking any factual foundation in the record.” *Stecyk*, 295 F.3d at 414 (3d Cir. 2002); *see Elcock*, 233 F.3d at 756 n.13 (3d Cir. 2000) (describing the foundation requirement as “found in the interstitial gaps among the federal rules[.]” but also noting that an expert opinion lacking factual

foundation “misleads the fact-finder and arguably does not comply with the ‘fit’ requirement” of Rule 702). Before the Court denied Plaintiffs leave to amend the Complaint to allege the existence of a non-compete agreement, Dr. Leffler stated in his initial report that EMMC minimum pricing was suspended in August 2005 and a non-compete period began immediately thereafter. (Leffler Rpt. ¶ 26.) Dr. Leffler also took this position in the historic opt-out cases. (*See* Civ. A. 06-620, Document Nos. 664, 703.) Dr. David’s report concludes the same. (David Rpt. ¶ 29.) Plaintiffs’ attempt to obfuscate this fact in rebuttal—only after the Court denied Plaintiff leave to assert a non-compete theory—is unconvincing. Moreover, Plaintiffs do not present any factual foundation that EMMC minimum pricing resumed after it was suspended in August 2005. Thus, the Court concludes that any expert opinions premised on the argument that the EMMC minimum pricing policy extended beyond August 2005 are inadmissible because this opinion lacks any factual foundation in the record.

Because the Court has denied leave to amend the Complaint to assert a non-compete theory of liability, and EMMC minimum pricing was suspended in August 2005, any damages resulting from alleged anticompetitive conduct after August 2005 do not fit the facts of the case. Plaintiffs’ third conspiracy period covers the duration of the three-year sales contract between OMS and Winn-Dixie beginning June 28, 2007 and ending in 2010. The fourth conspiracy period covers only a few months in late 2010. Dr. Leffler’s third and fourth conspiracy periods each begin years after the suspension of EMMC minimum pricing in August 2005, and Plaintiffs do not contend that any overcharges in those periods were caused by anticompetitive conduct before August 2005. Therefore, Dr. Leffler’s opinions on damages during the third and fourth conspiracy periods will not assist the trier of fact to understand the evidence or resolve a disputed issue and are not

admissible pursuant to Rule 702.

As for the second conspiracy period—August 2005 through June 2007—Plaintiffs argue that even if this period extends after EMMC minimum pricing ended, those damages are still the result of EMMC minimum pricing before August 2005. Winn-Dixie’s mushroom purchases during the second conspiracy period were made pursuant to a two-year contract between Winn-Dixie and OMS that was entered into in June 2005, which was before the end of EMMC minimum pricing. (Pls.’ Resp. at 9, 15, 19.) Plaintiffs present the June 2005 contract between Winn-Dixie and OMS, which set the price of mushroom sales throughout the second conspiracy period. (*See* Pls.’ Opp’n Ex. 6.) Dr. Leffler also states that the prices in this contract were above EMMC minimum prices. (Leffler Rebut. Rpt. p. 8 n.23.) The Court agrees that the 2005 contract between Winn-Dixie and OMS is a sufficient factual basis for Dr. Leffler to conclude that his damages estimate during the second conspiracy period is attributable to EMMC minimum pricing. Any damages estimate for mushroom sales during the second conspiracy period could be helpful to the trier of fact and will not be excluded.

In his declaration presented in opposition to Defendants’ motion, Dr. Leffler re-estimates the Winn-Dixie overcharges until only June 2007, the end of the second conspiracy period. (Leffler Decl. ¶ 7 n.12; *see id.* ¶ 5 n.8.) The Court will allow Plaintiff to rely on the revised damages estimate set forth in Dr. Leffler’s declaration as though it were a timely supplemental disclosure pursuant to Rule 26(e)(2).

#### **B. Plaintiffs’ Motion to Exclude the Proposed Testimony of Dr. David**

Plaintiffs move to exclude the testimony of Defendants’ rebuttal expert Dr. David, pursuant to Rule 702, on the grounds that his opinions are untested and based upon unreliable methodology

and data, and, pursuant to Rule 403, on the grounds that the probative value of his testimony is substantially outweighed by its prejudicial effect. Following a *Daubert* hearing in the historic opt-out cases, Judge O'Neill considered and rejected many of these same arguments in a well-reasoned opinion permitting the proposed testimony of Dr. David. For many of the same reasons previously articulated by Judge O'Neill, the Court will deny the motion to exclude Dr. David's testimony.

*1. Reliability of Dr. David's Rebuttal Expert Opinions and Methodology*

Rule 26(a)(2)(D)(ii) permits expert testimony "solely to contradict or rebut evidence on the same subject matter identified by another party[.]" "It is the proper role of rebuttal experts to critique plaintiffs' expert's methodologies and point out potential flaws in the plaintiff's experts' reports." *Aviva Sports, Inc. v. Fingerhut Direct Mktg., Inc.*, 829 F. Supp. 2d 802, 835 (D. Minn. 2011). Dr. David is a rebuttal expert witness retained to analyze the findings of Plaintiffs' expert Dr. Leffler and to offer opinions regarding Plaintiffs' damages. (David Rpt. ¶ 2.) In support of the expert report he authored for this case, Dr. David reviewed materials including Defendants' transactional data, excel files of sales data, documents produced in this matter, deposition transcripts, Dr. Leffler's report and supporting materials, and publicly available data concerning many of the variables in Dr. Leffler's analysis. (*See* David Rpt. App'x 1.) Dr. David offers specific criticisms of Dr. Leffler's regression model and the facts upon which it relies (*see id.* ¶¶ 58-80), which the Court described in Section III.A, *supra*. Plaintiff seeks to exclude Dr. David's testimony, pursuant to Rule 702, because it is based on untested theories, unreliable data, and an unaccepted methodology.

*a. Testing of Regression Model Criticism*

Plaintiffs' primary argument to exclude Dr. David's testimony is that he did not test his

opinions or conclusions. (Pls.’ Mot. to Exclude or Limit the Opinions of Defs.’ Expert [Pls.’ Mot.] at 5-23.) Specifically, Plaintiffs argue Dr. David did not test his criticisms of Dr. Leffler’s regression model related to an omitted control variable for farm closings, the Dole brand premium, negative supply variable coefficients, or the benchmark period, and therefore, Dr. David’s opinions on these topics are unreliable.

Plaintiffs argue that an expert’s testing of a theory is the first *Daubert* reliability factor, but *Daubert* explicitly declined to “set out a definitive checklist or test” to ascertain reliability and emphasized that the Rule 702 inquiry is “a flexible one.” 509 U.S. at 593-94; *see Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999). Nevertheless, Plaintiffs essentially argue that Dr. David fails to satisfy Rule 702’s requirements that expert witnesses apply reliable principles and methods and that the testimony be helpful to the fact-finder. Plaintiffs rely on *Advanced Telemedia, L.L.C. v. Charter Communications, Inc.*, Civ. A. No. 05-2662, 2008 WL 6808442, \*1 (N.D. Ga. July 17, 2008), in which the court excluded a proposed rebuttal expert who had identified flaws in the plaintiff’s expert’s method, without reviewing the underlying data, performing any testing, or testifying that a different method would yield different results. The *Advanced Telemedia* court concluded that the rebuttal expert’s testimony did not meet the *Daubert* standard because it was “too speculative and unreliable and it will not assist the jury in determining the amount of damages....” *Id.*; *see also B-K Cypress Log Homes Inc. v. Auto-Owners Ins. Co.*, Civ. A. No. 09-211, 2012 WL 1933766, \*6 (N.D. Fla. May 25, 2012) (“a pure rebuttal opinion that does not offer any alternative methodology or analysis...would not aid the jury in determining the amount of damages”).

Despite this opinion, “[a] number of other district courts have held that rebuttal expert

witnesses may criticize other experts' theories and calculations without offering alternatives.” *Aviva Sports*, 829 F. Supp. 2d at 834-35 (D. Minn. 2011) (collecting cases). Indeed, “[i]f two contradictory expert opinions meet the requisite threshold of reliability,” it is the function of the factfinder to assess the credibility of those contradictory experts, but “defendants’ experts have a less demanding task, since they have no burden to produce models or methods of their own; they need only attack those of plaintiffs’ experts.” *In re Zyprexa Prod. Liab. Litig.*, 489 F. Supp. 2d 230, 285 (E.D.N.Y. 2007) (Weinstein, J.). In order to demonstrate reliability to meet the requirements of Rule 702, a rebuttal expert, like any expert witness, need only show “good grounds” for the proposed testimony. *United States v. Velasquez*, 64 F.3d 844, 851 (3d Cir. 1995); *see Paoli II*, 35 F.3d at 744 (3d Cir. 1994) (“an expert opinion [is] reliable under Rule 702 if it is based on ‘good grounds,’ *i.e.*, if it is based on the methods and procedures of science”). In *Velasquez*, the Third Circuit found reversible error in a trial court’s decision to exclude rebuttal expert testimony and noted that such testimony was “highly relevant” and would assist the jury “to properly weigh the testimony” of the initial expert. *Id.* at 848, 852. Judge O’Neill adopted this same perspective when admitting Dr. David’s opinion in the historic opt-out cases. He concluded that “Dr. David’s testimony will aid the fact finder in evaluating the proper weight to be afforded to Dr. Leffler’s testimony as it is relevant to the question of whether Dr. Leffler’s regression models...are flawed.” (Civ. A. 06-620, Document No. 740 at 8.) The Court agrees with this sound reasoning.

Here, Dr. David’s proposed testimony will assist the finder of fact in properly weighing Dr. Leffler’s testimony. Dr. David did not need to perform his own damages computation or develop his own regression model to meet the standards of reliability as a rebuttal witness. Instead,

he needed only to reliably apply reliable scientific methods in assessing and critiquing Dr. Leffler's regression model. Dr. David reviewed the underlying facts and data on which Dr. Leffler relied to reach his opinions. (*See* David Rpt. ¶¶ 35-39, 54-57, App'x 1.) In fact, Dr. Leffler agreed with Dr. David's criticisms concerning transactions that were double counted in the data and revised his report accordingly. (Leffler Rebut. Rpt. ¶ 13 n.18.) Moreover, Dr. David cites to econometric source materials for his opinions on principles such as over-fitting, negative coefficient correlation, and omitted control variable bias.<sup>7</sup> Dr. David's background also favors finding these opinions reliable, since an expert's "level of expertise may affect the reliability of the expert's opinion." *Elcock*, 233 F.3d 734, 749 (3d Cir. 2000) (quoting *Paoli II*, 35 F.3d at 741). Dr. David holds a Ph.D. in economics from Stanford University, and he has performed economic analysis for litigation and public policy matters for a total of approximately 24 years with the National Economics Research Associates, Inc., Criterion Economics, LLC, and Edgeworth Economics, LLC, where he is the current President. (David Rpt. ¶¶ 4-5, App'x 2.) Throughout his career, Dr. David has specialized in applied microeconomics and econometrics, and he has provided expert testimony on more than 60 occasions. (*Id.* ¶ 5.) Thus, the Court concludes that Dr. David's criticisms of Dr. Leffler's regression model are reliable.

Plaintiffs make two additional unavailing arguments to exclude Dr. David's opinions on supposedly omitted variables in Dr. Leffler's regression model. First, Plaintiffs argue that Dr. David's criticism concerning farm closures does not fit the facts of the case because overall

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<sup>7</sup> (*See* David Rpt. ¶ 73 n.150 (citing Frank E. Harrell, *Regression Modeling Strategies* (2013)); ¶ 75 n.152 (citing J. Johnston, *Econometric Models* (3d ed. 1984)); ¶ 76 n.153 (quoting Peter Kennedy, *A Guide to Econometrics* (5th ed. 2005)); ¶¶ 74 n.151, 78 (citing ABA Section of Antitrust Law, *supra*, § 5.B.1.b.2).)



mushroom production in Pennsylvania increased after the farm closures Dr. David identifies. (Pls.’ Mot. at 9.) This argument regarding mushroom production does not make irrelevant or unreliable Dr. David’s opinion that farm closures were a necessary control variable. The Court agrees with Judge O’Neill’s prior ruling that Defendants sufficiently proved that Dr. David’s opinions regarding farm closures were based on good grounds, and thus are admissible. Next, Plaintiffs argue that Dr. David’s opinion concerning the Dole brand premium should be excluded because he incorrectly asserts that all Winn-Dixie purchases from OMS were Dole brand mushrooms. (Pls.’ Mot. at 22-23.) As explained in Section III.A.1.a.ii, *supra*, this is a disputed question of fact that should appropriately be resolved by the factfinder. Thus, the Court will not exclude Dr. David’s opinions on these topics under Rule 702.

*b. Unreliable Data for Declining Market Share*

In addition to arguing that Dr. David failed to test his opinions, Plaintiffs also seek to exclude Dr. David’s testimony regarding market share because it is based on unreliable data. (Pls.’ Mot. at 26-28.) Rule 702 requires expert testimony to be “based on sufficient facts or data.” Fed. R. Evid. 702(b); *see ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 294 (3d Cir. 2012) (reasonableness of an expert’s reliance on facts or data to form an opinion is an appropriate inquiry under Rule 702). In addition, though Plaintiffs do not cite to Rule 703, it dictates that an expert’s opinion may rely on hearsay facts or data if they are “of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject....” Fed. R. Evid. 703. This standard is equivalent to the reliability standard of Rule 702, meaning “there must be good grounds on which to find the data reliable.” *Paoli II*, 35 F.3d at 748 (3d Cir. 1994).

Dr. David opines that the market share of EMMC members was declining such that by

2006 the EMMC did not have sufficient market share to undertake monopolistic activity. (David Rpt. ¶ 67; *see* ¶¶ 66, 68.) Plaintiffs argue that this assessment of declining EMMC market share is based on unreliable data from two sources—EMMC dues assessment data and sales data that lacks a citation. (Pls.’ Mot. at 26-27.) Plaintiffs argue that these data sources differ substantially from one another and are contradicted by deposition testimony and other documents from the EMMC, and therefore, Dr. David’s opinions based on this data are unreliable. First, the Court notes that in light of its ruling to exclude Dr. Leffler’s third conspiracy period, it is unlikely that Dr. David’s opinion concerning declining market share remains relevant to the case. *See supra* n.6. But even if declining EMMC market share does remain relevant to Dr. David’s opinions, Dr. David’s data sources related to EMMC membership and Defendants’ Agaricus mushroom sales were produced in this litigation or the related class action. (*See* David Rpt. App’x 1.) These sources therefore present reliable grounds for the basis of Dr. David’s opinions. As for the discrepancies Plaintiffs point out in these data sources, “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Karlo v. Pittsburgh Glass Works, LLC*, 849 F.3d 61, 83 (3d Cir. 2017) (quoting *Daubert*, 509 U.S. at 596). Plaintiffs’ arguments go to the weight of Dr. David’s testimony on this issue, not its admissibility.

*c. Price Trends Methodology*

Plaintiffs also argue that Dr. David’s opinions on mushroom price trends are based solely on “visual inspection” of a trend in a price graph, which is not a sound scientific principle, and therefore must be excluded. (Pls.’ Mot. at 30-36.) Specifically, Plaintiffs argue that price trends cannot provide an economic explanation as to causation, since an economist must use an analysis

that controls for supply and demand factors. (Pls.’ Mot. at 32.) Plaintiffs state that Dr. David relies on his presentation of declining prices to argue that Dr. Leffler’s model is flawed. (Pls.’ Mot. at 31 (quoting David Rpt. ¶ 30).) This argument misstates Dr. David’s opinion. Dr. David uses his analysis of price trends to criticize Dr. Leffler’s claim that the pattern of rising average prices of fresh *Agaricus* mushrooms verified the impact of the EMMC minimum pricing policy. (David Rpt. ¶ 69 (citing Leffler Rpt. ¶ 50).) In fact, Dr. David’s report makes an analogous critique to Plaintiffs’ argument. Dr. David states that Dr. Leffler’s assertion that a correlation existed between market-wide price increases and EMMC minimum pricing could not explain causation. (*Id.* ¶ 70.) Thus, both sides agree that a visual inspection of price trends is not a reliable scientific method to prove causation.

However, neither expert relies exclusively on visual inspections of price trends to offer opinions on causation or overcharge damages. In order to offer opinions on causation and damages, Dr. Leffler relies on testimony and documents regarding the EMMC’s anticompetitive conduct and empirical analysis of damages using his multiple regression model. (*See* Leffler Rpt. ¶¶ 50-56.) Dr. David’s critique of those opinions relies on an analysis of the econometric principles underlying the regression model. (*See* David Rpt. ¶¶ 73-80.) Therefore, Dr. David’s opinions on overcharge damages are not premised on price trends, so the Court will not exclude his opinions as unreliable.

## 2. *Rule 403*

Finally, Plaintiffs seek to exclude Dr. David’s testimony pursuant to Federal Rule of Evidence 403. Pursuant to Rule 403, the Court may exclude relevant evidence if its probative value is substantially outweighed by unfair prejudice or confusion of the issues. Fed. R. Evid. 403.

Because expert evidence can be more misleading than other evidence, Rule 403 gives a judge more power over experts than over lay witnesses. *Paoli II*, 35 F.3d at 747 (citing *Daubert*, 509 U.S. at 595). Nevertheless, “exclusion under Rule 403 should be rare[,]” and “in order for a district court to exclude scientific evidence, there must be something *particularly* confusing about the scientific evidence at issue—something other than the general complexity of scientific evidence.” *Id.* at 747, 747 n.16. Plaintiffs argue that because Dr. David’s opinions were never tested, and thus are speculative and unreliable, their inclusion at trial would mislead the jury and prejudice Plaintiffs. (Pls.’ Mot. at 36.) The Court has already concluded that Dr. David’s testimony is not unreliable, and Plaintiffs have not pointed to any aspect of Dr. David’s testimony that is so particularly confusing or misleading as to substantially outweigh its probative value. At this pretrial stage, the Court will not exclude the proposed testimony pursuant to Rule 403.

#### **IV. CONCLUSION**

For the foregoing reasons, Defendants’ Motion to Preclude Plaintiffs’ Proposed Expert Testimony at Trial is granted in part and denied in part. Plaintiffs’ Motion to Exclude or Limit the Opinions of Defendants’ Expert is denied. An Order consistent with this Memorandum will be docketed separately.